

ABSTRACT

[Abstract]

[Object] To provide an acceleration sensor in which a difference in resonance characteristics between two resonators can be easily adjusted even when casing components are already attached to an acceleration-sensor element.

[Solving Means] An acceleration sensor 1A has a bimorph acceleration-sensor element 2A including first and second resonators 3 and 4 attached to opposite sides of a base plate 5 with respect to a direction in which acceleration is applied. One longitudinal end or both longitudinal ends of the acceleration-sensor element 2A is/are fixed such that the first and second resonators 3 and 4 bend in the same direction in response to the acceleration. Changes in frequency or changes in impedance in the first and second resonators 3 and 4 caused by the bending of the acceleration-sensor element 2A are differentially detected in order to detect the acceleration. Opposite sides of the acceleration-sensor element with respect to the application direction of acceleration are respectively covered with a pair of casing components 6. Electrodes 3a and 4a disposed on the main surfaces of the respective first and second resonators face one of opposite open planes defined by a combination of the acceleration-sensor element and the

casing components with respect to a direction perpendicular to the application direction of acceleration. Accordingly, a trimming process for the electrodes can be readily performed.

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